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EXAMINER	
GUILL, RUSSELL L	

ART UNIT	PAPER NUMBER
2123	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/020,601	WHITNEY, KRISTOPHER CRAIG	
	Examiner	Art Unit	
	Russell L. Guill	2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 December 2001*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 - 23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 - 23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *14 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *2/28/2002*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1 – 23 have been examined. Claims 1 – 23 have been rejected.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Kauffman (U.S. Patent Number 6,633,916), further in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S).

3.1. The art of Kauffman is directed toward a method and apparatus for virtual resource handling in a multi-processor computer (***Title***), including providing a console (***column 7, lines 45 – 60***).

3.2. The art of MochaPocketTN5250 is directed to software to emulate a 5250 terminal on a handheld computer (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

3.3. The art of Mills is directed to a plug-in expansion card for a handheld computer that incorporates both a memory expansion card and an IO connector (***Abstract, and figure 7***).

3.4. Mills appears to teach a plug-in module coupled to a handheld computer using program code resident in the plug-in module, and an IO connector on the plug-in module used connected to a local host computer (***figure 7; figure 8; and column 3, lines 55 – 67; and column 7, lines 30 – 35***).

3.5. Mills does not specifically teach ***connecting a handheld computer to an adapter on a logically-partitioned computer via*** a plug-in module coupled to the handheld computer ***and connected to the adapter via a cable***.

3.6. Mills does not specifically teach ***configuring the handheld computer to emulate a console for a logical partition in the logically-partitioned computer using program code resident in the plug-in module***.

3.7. Kauffman appears to teach connecting a personal computer to an adapter on a logically-partitioned computer connected to the adapter via a cable (***figure 2; and column 7, lines 45 – 60***).

3.8. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a console using program code (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

3.9. The motivation to use the art of Kauffman with the art of Mills is the statement in Kauffman that a personal computer can be used as the console (***column 7, lines 55 – 60***), which provides the benefit of a versatile multi-purpose device compared to a fixed terminal.

3.10. The motivation to use the art of MochaPocketTN5250 with the art of Mills is the statement in Kauffman that a personal computer can be used as the console (***column 7, lines 55 – 60***).

3.11. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and MochaPocketTN5250 with the art of Kauffman to produce the claimed inventions.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), in view of Armstrong (U.S. Patent 6,279,046).

4.1. The art of Armstrong is directed to an event driven interface for a logically-partitioned computer (***Title***).

4.2. Mills does not specifically teach a logically-partitioned AS/400-compatible midrange computer, and an adapter that comprises a workstation adapter allocated to the at least one logical partition.

4.3. Kauffman appears to teach an adapter that comprises a workstation adapter allocated to the at least one logical partition (***figure 2, and column 7, lines 45 – 60***).

4.4. Armstrong appears to teach a logically-partitioned AS/400-compatible midrange computer (***figure 1, and column 3, lines 32 – 48***).

4.5. The motivation to use the art of Armstrong with the art of Mills is the statement in Armstrong that a workstation is connected to the computer (***figure 1, element 28; and column 3, lines 49 – 64***).

4.6. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and the art of Armstrong to produce the claimed invention.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), in view of Dye (U.S. Patent 6,145,069).

5.1. Claim 3 is a dependent claim of claim 1, and thereby inherits all of the rejected limitations of claim 1.

5.2. The art of Dye is directed to a method for improving storage density and access speed for non-volatile memory and embedded memory devices (***Title***).

5.3. Mills does not specifically teach downloading program code from the plug-in module to the handheld computer.

5.4. Dye appears to teach downloading program code from the plug-in module to the handheld computer (***column 1, lines 55 – 62***).

5.5. The motivation to use the art of Dye with the art of Mills is to avoid low frequency operation, and allow for faster execution (***Dye, column 1, lines 55 – 62***).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), and Dye (U.S. Patent 6,145,069) in view of Armstrong (U.S. Patent 6,279,046).

6.1. Claim 4 is a dependent claim of claim 3, and thereby inherits all of the rejected limitations of claim 3.

6.2. The art of Armstrong is directed to an event driven interface for a logically-partitioned computer (***Title***).

6.3. Mills does not specifically teach that the handheld computer emulates a 5250-compatible console that communicates with an AS/400-compatible midrange computer.

6.4. Armstrong appears to teach an AS/400-compatible midrange computer (***figure 1, and column 3, lines 32 – 48***).

6.5. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a 5250-compatible console (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

6.6. The motivation to use the art of Armstrong with the art of Mills is the statement in Armstrong that a workstation is connected to the computer (***figure 1, element 28; and column 3, lines 49 – 64***), and the graphic in Mills that the handheld is connected to a local host computer (***figure 8***), which provides a portable low-cost alternative to a workstation.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), in view of Powderly (U.S. Patent Number 6,732,067).

7.1. The art of Powderly is directed toward a system and adapter card for remote console emulation (***Title***).

7.2. Mills appears to teach a handheld computer with a network interface on a plug-in module (***figure 8, and column 5, lines 60 – 65***).

7.3. Mills does not specifically teach that connecting a handheld computer ***to an adapter comprises attaching the cable to the adapter and to a network interface on the plug-in module***.

7.4. Powderly appears to teach that connecting a console to an adapter comprises attaching the cable to the adapter and to a network interface on a console (***Abstract, and column 1, lines 29 – 35***).

7.4.1. Regarding (***Abstract, and column 1, lines 29 – 35***); it would have been obvious that a network consists of a cable connected between the adapter and the console.

7.5. The motivation to use the art of Powderly with the art of Mills is the configuration shown in Mills, figure 8, element labeled "Internet, or other network", that displays a handheld computer attached to a network.

7.6. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and with the art of Powderly to produce the claimed invention.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), and Powderly (U.S. Patent Number 6,732,067), in view of Comp (U.S. Patent Number 5,875,350).

8.1. The art of Comp is directed to compressed message exchange initiated by basic command accompanied by enhancement code (***Title***).

8.2. Mills does not specifically teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer.

8.3. Comp appears to teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***)

8.4. The motivation to use the art of Comp with the art of Mills is the ability to increase the communications speeds with minimal upgrading of components (***Comp, column 2, lines 15 – 24***).

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), in view of common knowledge in the art.

9.1. Mills does not specifically teach authenticating with a logical partition via an emulated console.

9.2. Official Notice is taken that it was old and well known to the ordinary artisan at the time of invention to authenticate by a userid and password in order to gain access to a computer. The motivation is to prevent damage to a computer system by unauthorized people.

10. Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S).

10.1. Claim 8 is a dependent claim of claim 1, and thereby inherits all of the rejected limitations of claim 1.

10.2. Claim 9 is a dependent claim of claim 8, and thereby inherits all of the rejected limitations of claim 8.

10.3. Regarding claim 8, Mills does not specifically teach performing a system administration operation on the logical partition via the emulated console.

10.4. Regarding claim 9, Mills does not specifically teach performing a second system administrative operation on a second logical partition in the logically-partitioned computer.

10.5. Regarding claim 8, Kauffman appears to teach performing a system administration operation on the logical partition via the emulated console (***column 7, lines 3 – 16***).

10.5.1. Regarding (***column 7, lines 3 – 16***); it would have been obvious that the system administration is performed by the emulated console.

10.6. Regarding claim 9, Kauffman appears to teach performing a second system administrative operation on a second logical partition in the logically-partitioned computer (***column 9, lines 4 – 11***).

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), in view of common knowledge in the art.

11.1. Claim 10 is a dependent claim of claim 9, and thereby inherits all of the rejected limitations of claim 9.

11.2. Mills does not specifically teach the method of claim 9 wherein the first adapter is allocated to the first logical partition, and the logically-partitioned computer includes a second adapter allocated to the second logical partition, and further comprising, after performing the first system administration operation, disconnecting the cable from the first adapter and connecting the cable to the second adapter, wherein performing a second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter.

11.3. Kauffman appears to teach that the first adapter is allocated to the first logical partition, and the logically-partitioned computer includes a second adapter allocated to the second logical partition (***figure 2***).

11.4. Official Notice is taken that was old and well known to the ordinary artisan at the time of invention to disconnect a cable from one port and connect the cable to a second port. The motivation is to obtain the benefit of reduced cost by needing only a single console for the multiple logical partitions.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), in view of Laity (U.S. Patent Publication Number 2001/0000161).

12.1. Claim 11 is a dependent claim of claim 9, and thereby inherits all of the rejected limitations of claim 9.

12.2. The art of Laity is directed to a PCMCIA card with integrated receptacles for receiving standard communications plugs (***Title***).

12.3. Mills does not specifically teach the method of claim 9, wherein the first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition, wherein the plug-in module includes a first and second network interfaces, wherein the first cable is coupled to the first network interface, the method further comprising, prior to performing the second system administration operation, connecting a second cable between the second adapter and the second network interface, wherein performing the second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter, and while the first cable is coupled between the first adapter and first network interface.

12.4. Kauffman appears to teach that the first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition (***figure 2***).

12.5. Laity appears to teach a plug-in module that includes a first and second network interfaces, wherein the first cable is coupled to the first network interface, and, prior to performing the second system administration operation, connecting a second cable between the second adapter and the second network interface, wherein performing the second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter, and while the first cable is coupled between the first adapter and first network interface (***figure 1; and paragraph [0003], especially the sentence that starts with, "Presently, Type II cards are used . . . "***).

12.5.1. Regarding (***figure 1; and paragraph [0003], especially the sentence that starts with, "Presently, Type II cards are used . . . "***); it would have been obvious that prior to performing the second system administration operation, a second cable must be connected between the second adapter and the second network interface. It also would have been obvious to have the first cable coupled between the first adapter and first network interface while performing the second system administration operation. Also, since the prior parent claims use the handheld computer performing as a console, it would have been obvious that the second system administration operation is performed via the handheld computer and plug-in module interacting with the second logical partition through the second adapter.

12.6. The motivation to use the art of Laity with the art of Mills is the benefit of not needing to swap cables when performing system administration on two logical partitions. Additionally, it allows two sessions to be carried on simultaneously on the emulated console.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S).

13.1. Claim 12 is a dependent claim of claim 9, and thereby inherits all of the rejected limitations of claim 9.

13.2. Mills does not specifically teach the method of claim 9, wherein the first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition, the method further comprising:

13.2.1. Connecting a second handheld computer to the second adapter via a second plug-in module coupled to the second handheld computer; and

13.2.2. Configuring the second handheld computer to emulate a second console for the second logical partition in the logically-partitioned computer using program code resident in the second plug-in module.

13.3. Kauffman appears to teach that a first adapter is allocated to the first logical partition, wherein the logically-partitioned computer includes a second adapter allocated to the second logical partition (***figure 2***).

13.4. Kauffman appears to teach connecting a second handheld computer to the second adapter via a second plug-in module coupled to the second handheld computer (***column 7, lines 55 – 57***).

13.4.1. Regarding (***column 7, lines 55 – 57***); since the parent claim 9 used a handheld computer with a plug-in module, it would have been obvious to use a second handheld computer connecting to a second adapter via a second plug-in module coupled to the second handheld computer.

13.5. Kauffman appears to teach configuring the second handheld computer to emulate a second console for the second logical partition in the logically-partitioned computer using program code resident in the second plug-in module (***column 7, lines 55 – 57***).

13.5.1. Regarding (***column 7, lines 55 – 57***); since the parent claim 9 used a handheld computer to emulate a console for logical partition in the logically-partitioned computer using program code resident in the second plug-in module, it would have been obvious to configure a second handheld computer to emulate a second console for the second logical partition in the logically-partitioned computer using program code resident in the second plug-in module.

14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Kauffman (U.S. Patent Number 6,633,916), and MochaPocketTN5250 (Document

provided by applicant on the Information Disclosure Statement, item B.S), in view of Arndt (U.S. Patent Number 6,892,383), further in view of common knowledge in the art.

14.1. Claim 13 is a dependent claim of claim 9, and thereby inherits all of the rejected limitations of claim 9.

14.2. The art of Arndt is directed to a system for informing a plurality of operating systems, each assigned to a separate partition within a logically partitioned data processing system, of which functions, provided by a hypervisor for creating and enforcing separation of the logical partitions are available for use, are available for use by the opersting systems (***Abstract***).

14.3. Mills does not specifically teach the method of claim 9, further comprising performing the first and second system administration operations while a user is concurrently authenticated to the first and second logical partitions.

14.4. Official Notice is taken that it was old and well known to the ordinary artisan at the time of invention to perform authentication by a userid and password in order to gain access to a computer. The motivation is to prevent damage to a computer system by unauthorized people.

14.5. Arndt appears to teach performing the first and second system administration operations while a user is concurrently connected to the first and second logical partitions (***column 7, lines 10 – 21***).

14.6. The motivation to use the art of Arndt with the art of Mills is the benefit of reduced cost by using a single handheld computer to manage multiple partitions concurrently.

15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Powderly (U.S. Patent Number 6,732,067).

15.1. The art of Powderly is directed toward a system and adapter card for remote console emulation (***Title***).

15.2. The art of Mills is directed to a plug-in expansion card for a handheld computer that incorporates both a memory expansion card and an IO connector (***Abstract, and figure 7***).

15.3. Mills appears to teach a plug-in module for a handheld computer comprising a memory (***figure 7***) and a network interface configured to receive a network connector (***Column 5, lines 61 – 62; and figure 8, element labeled "Internet, or other network"***), and program code resident in the memory (***column 7, lines 30 – 32***).

15.4. Mills does not specifically teach program code resident in the memory ***and configured to control a handheld computer to emulate a console that communicates with a multi-user computer over the network interface***.

15.5. Powderly appears to teach program code resident in a memory and configured to emulate a console that communicates with a multi-user computer over a network interface (***Abstract; and column 1, lines 29 – 35; and column 2, lines 65 – 68, and column 3, lines 1 - 2***).

15.6. The motivation to use the art of Powderly with the art of Mills is the configuration shown in Mills, figure 8, element labeled "Internet, or other network", that displays a handheld computer attached to a network.

15.7. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and with the art of Powderly to produce the claimed invention.

16. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870) and Powderly (U.S. Patent Number 6,732,067), in view of Comp (U.S. Patent Number 5,875,350).

16.1. Claim 16 is a dependent claim of claim 15, and thereby inherits all of the rejected limitations of claim 15.

16.2. The art of Comp is directed to compressed message exchange initiated by basic command accompanied by enhancement code (***Title***).

16.3. Mills does not specifically teach that a network interface comprises a twinaxial interface, and the network connector comprises a twinaxial connector.

16.4. Comp appears to teach that a network interface comprises a twinaxial interface, and the network connector comprises a twinaxial connector (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***)

16.5. The motivation to use the art of Comp with the art of Mills is the ability to increase the communications speeds with minimal upgrading of components (***Comp, column 2, lines 15 – 24***).

17. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870) and Powderly (U.S. Patent Number 6,732,067), and Comp (U.S. Patent Number 5,875,350).

17.1. Claim 17 is a dependent claim of claim 16, and thereby inherits all of the rejected limitations of claim 16.

17.2. Mills does not specifically teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer, and the network connector comprises a Twinax-compatible connector.

17.3. Comp appears to teach that a network interface comprises a Twinax-compatible interface suitable for communicating with an AS/400-compatible midrange computer, and the network connector comprises a Twinax-compatible connector (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***).

17.4. The motivation to use the art of Comp with the art of Mills is the ability to increase the communications speeds with minimal upgrading of components (***Comp, column 2, lines 15 – 24***).

18. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Powderly (U.S. Patent Number 6,732,067) in view of MochaPocketTN5250 (Document provided by applicant on the Information Disclosure Statement, item B.S), further in view of Comp (U.S. Patent Number 5,875,350).

18.1. Claim 18 is a dependent claim of claim 15, and thereby inherits all of the rejected limitations of claim 15.

18.2. The art of MochaPocketTN5250 is directed to software to emulate a 5250 terminal on a handheld computer (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

18.3. The art of Comp is directed to compressed message exchange initiated by basic command accompanied by enhancement code (***Title***).

18.4. Mills does not specifically teach that the program code is configured to control the handheld computer to emulate a 5250-compatible console that communicates with an AS/400-compatible midrange computer.

18.5. Comp appears to teach a 5250-compatible console that communicates with an AS/400-compatible midrange computer (***figure 6; and column 4, lines 55 – 68; and column 5, lines 1 – 25***).

18.6. MochaPocketTN5250 appears to teach configuring a handheld computer to emulate a 5250-compatible console (***paragraph labeled "Application Description:"; and section labeled "Reviews"***).

18.7. The motivation to use the art of Comp with the art of Mills is the ability to increase the communications speeds with minimal upgrading of components (***Comp, column 2, lines 15 – 24***).

18.8. The motivation to use the art of MochaPocketTN5250 with the art of Mills are the benefits versatility and portability by using a handheld computer to replace a fixed workstation.

19. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870) and Powderly (U.S. Patent Number 6,732,067), in view of Handspring ("Development kit for Handspring Handheld Computers Release 1.0", 1999, Handspring).

19.1. The art of Handspring is directed toward electrical, mechanical, and software development for the Visor handheld computer (***page section I-1, section I Introduction***).

19.2. Mills does not specifically teach the module of claim 15, further comprising a housing and module interface, wherein the housing has a form factor, and the module interface is configured, to couple to a Springboard-compatible port on a Visor-compatible handheld computer.

19.3. Handspring appears to teach a housing and module interface, wherein the housing has a form factor, and the module interface is configured, to couple to a Springboard-compatible port on a Visor-compatible handheld computer (***section V: Mechanical Information, Chapter 3 Springboard standard module, page sectionV-4***).

19.4. The motivation to use the art of Handspring with the art of Mills is that a Visor handheld computer is a commercially available product with development documentation that makes it a good candidate for implementing the emulator.

20. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870) and Powderly (U.S. Patent Number 6,732,067), in view of Kauffman (U.S. Patent Number 6,633,916).

20.1. The art of Kauffman is directed toward a method and apparatus for virtual resource handling in a multi-processor computer (***Title***), including providing a console (***column 7, lines 45 – 60***).

20.2. Mills does not specifically teach the module of claim 15, wherein the program code is configured to emulate a console that communicates with a logical partition in a logically-partitioned multi-user computer.

20.3. Kauffman appears to teach that the program code is configured to emulate a console that communicates with a logical partition in a logically-partitioned multi-user computer (***figure 2; and column 7, lines 45 – 60; and column 1, lines 15 – 32***).

20.4. The motivation to use the art of Kauffman with the art of Mills is the statement in Kauffman that a personal computer can be used as the console (***column 7, lines 55 – 60***), which provides the benefit of a versatile multi-purpose device compared to a fixed terminal.

21. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Powderly (U.S. Patent Number 6,732,067), in view of Laity (U.S. Patent Publication Number 2001/0000161).

21.1. Claim 21 is a dependent claim of claim 15, and thereby inherits all of the rejected limitations of claim 15.

21.2. The art of Laity is directed to a PCMCIA card with integrated receptacles for receiving standard communications plugs (***Title***).

21.3. Mills does not specifically teach a second network interface configured to receive a second network connector.

21.4. Laity appears to teach a second network interface configured to receive a second network connector (***figure 1; and paragraph [0003], especially starting at the sentence that starts with, "Presently, Type II cards are used . . . "***).

21.5. The motivation to use the art of Laity with the art of Mills is the benefit of not needing to swap cables when performing system administration on two logical partitions. Additionally, it allows two sessions to be carried on simultaneously on the emulated console.

22. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), and Powderly (U.S. Patent Number 6,732,067), and Laity (U.S. Patent Publication Number 2001/0000161), in view of Arndt (U.S. Patent Number 6,892,383).

22.1. Claim 22 is a dependent claim of claim 12, and thereby inherits all of the rejected limitations of claim 21.

22.2. The art of Arndt is directed to hypervisor function sets (***Title***).

22.3. Mills does not specifically teach the module of claim 21, wherein the program code is configured to control the handheld computer to emulate first and second consoles that respectively communicate with first and second logical partitions in a logically-partitoned multi-user computer over the first and second network interfaces.

22.4. Arndt appears to teach that the program code is configured to control the handheld computer to emulate first and second consoles that respectively communicate with first and second logical partitions in a logically-partitoned multi-user computer over the first and second network interfaces (***figure 1; and column 7, lines 5 – 21***).

22.4.1. Regarding (***figure 1; and column 7, lines 5 – 21***); since the parent claim uses program code configured to control the handheld computer to emulate a console, it would have been obvious that the program code is configured to control the handheld computer to emulate first and second consoles that respectively communicate with first and second logical partitions in a logically-partitoned multi-user computer over the first and second network interfaces.

22.5. The motivation to use the art of Arndt with the art of Mills is the benefit of reduced cost by using a single handheld computer to manage multiple partitions.

23. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mills (U.S. Patent Number 6,353,870), in view of Powderly (U.S. Patent Number 6,732,067).

23.1. The art of Powderly is directed toward a system and adapter card for remote console emulation (***Title***).

23.2. The art of Mills is directed to a plug-in expansion card for a handheld computer that incorporates both a memory expansion card and an IO connector (***Abstract, and figure 7***).

23.3. Mills appears to teach a handheld computer including a module interface (***figure 7, and figure 8***).

23.4. Mills appears to teach a plug-in module coupled to the module interface of the handheld computer (***figure 7, and figure 8***), the plug-in module including a network interface configured to receive a network connector (***figure 8, elements 140 and "Internet, or other network"; and column 5, lines 59 – 67***), a memory (***figure 7, and figure 8***), and program code resident in the memory (***column 7, lines 30 – 32***).

23.5. Mills does not specifically teach program code resident in the memory ***and configured to control a handheld computer to emulate a console that communicates with a multi-user computer over the network interface***.

23.6. Powderly appears to teach program code resident in a memory and configured to emulate a console that communicates with a multi-user computer over a network interface (***Abstract, and column 1, lines 29 – 35***).

23.7. The motivation to use the art of Powderly with the art of Mills is the configuration shown in ***figure 8, element labeled "Internet, or other network"***, of Mills that displays a handheld computer attached to a network.

23.8. Therefore, as discussed above, it would have been obvious to the ordinary artisan at the time of invention to use the art of Mills and with the art of Powderly to produce the claimed invention.

Conclusion

24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Russell L. Guill whose telephone number is 571-272-7955. The examiner can normally be reached on Monday – Friday 9:00 AM – 5:30 PM.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 571-272-3749. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Any inquiry of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist: 571-272-2100.

26. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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